

Claims

1. A gene which is selected from a polynucleotide represented by SEQ ID NO. 1 or a polynucleotide encoding a γ -butyrobetaine hydroxylase represented by SEQ ID NO. 2.

5 2. A recombinant vector comprising the gene of claim 1.

3. The recombinant vector according to claim 2, which has accession number KCCM-10557.

10 4. A transformant transformed with a recombinant vector comprising the gene of claim 1.

5. The transformant according to claim 4, which is *Escherichia coli*.

15 6. A γ -butyrobetaine hydroxylase having an amino acid sequence that is selected from an amino acid sequence encoded by a polynucleotide represented by SEQ ID NO. 1 or an amino acid sequence represented by SEQ ID NO. 2.

7. A method of preparing L-carnitine, which comprises hydroxylating γ -butyrobetaine using the γ -butyrobetaine hydroxylase of claim 6.